

WHAT IS CLAIMED IS:

1 1. A method for quantifying risk of fraud associated with a
2 purchasing card transaction, the method comprising:
3 obtaining a charge-back history associated with a consumer involved
4 in the purchasing card transaction; and
5 determining a risk score based on the charge-back history.

1 2. The method of claim 1 wherein the step of obtaining a charge-
2 back history includes obtaining a reason code for each charge-back included in the
3 charge-back history.

1 3. The method of claim 2 further comprising weighting each
2 charge-back included in the charge-back history based on the corresponding reason
3 code.

1 4. The method of claim 1 further comprising determining how
2 each charge-back included in the charge-back history is associated with the
3 purchasing card transaction, and weighting each charge-back based on the
4 corresponding association with the purchasing card transaction.

1 5. The method of claim 1 further comprising obtaining additional
2 charge-back history associated with a machine identification number of a machine
3 involved in the purchasing card transaction, and wherein the step of determining a
4 risk score includes determining the risk score based on the additional charge-back
5 history.

1 6. The method of claim 1 wherein the step of determining a risk
2 score includes comparing the charge-back history to predetermined ranges of
3 charge-backs.

1 7. The method of claim 1 wherein the step of determining a risk
 score is performed using a linear risk model.

1 8. The method of claim 1 wherein the step of determining a risk
2 score is performed using a regression risk model.

1 9. The method of claim 1 wherein the step of determining a risk
2 score is performed using a decision tree risk model.

1 10. The method of claim 1 wherein the step of determining a risk
2 score is performed using a neural network risk model.

1 11. The method of claim 1 wherein the step of determining a risk
2 score includes determining the risk score based on a plurality of purchasing card
3 transaction characteristics.

1 12. A method for quantifying risk of fraud associated with a
2 purchasing card transaction, the method comprising:

3 obtaining a charge-back history associated with a consumer involved
4 in the purchasing card transaction, wherein the charge-back history includes charge-
5 backs associated with a particular purchasing card account of the consumer, and a
6 reason code for each charge-back;

7 weighting each charge-back based on the corresponding reason code;

8 and

9 determining a risk score based on the weighted charge-backs.

1 13. A system for quantifying risk of fraud associated with a
2 purchasing card transaction, the system comprising:

3 an authorization source for obtaining a charge-back history associated with
4 a consumer involved in the purchasing card transaction, the authorization source
5 including a risk model for determining a risk score based on the charge-back
 history.

1 14. The system of claim 13 wherein the authorization source
2 includes a database for storing a reason code for each charge-back included in the
3 charge-back history, and a processor in communication with the database and

4 including the risk model, wherein the risk model includes instructions for
5 determining the risk score based on the reason codes.

1 15. The system of claim 14 wherein the risk model includes
2 instructions for weighting each charge-back included in the charge-back history
3 based on the corresponding reason code.

1 16. The system of claim 13 wherein the risk model includes
2 instructions for determining how each charge-back included in the charge-back
3 history is associated with the purchasing card transaction, and instructions for
4 weighting each charge-back based on the corresponding association with the
5 purchasing card transaction.

1 17. The system of claim 13 wherein the risk model includes
2 instructions for comparing the charge-back history to predetermined ranges of
3 charge-backs in order to determine the risk score.

1 18. The system of claim 13 wherein the risk model comprises a
2 linear risk model.

1 19. The system of claim 13 wherein the risk model comprises a
2 regression risk model.

1 20. The system of claim 13 wherein the risk model comprises a
2 decision tree risk model.

1 21. The system of claim 13 wherein the risk model comprises a
2 neural network risk model.

1 22. A computer system for quantifying risk of fraud associated
2 with a purchasing card transaction, the computer system comprising:

3 a database for storing a charge-back history associated with a
4 consumer involved in the purchasing card transaction; and

- 5 a processor in communication with the database, the processor
- 6 including a risk model for determining a risk score based on the charge-back
- 7 history.